

Hanford Air Operating Permit Renewal # 2, Revision B
Public Comment Period: March 22 through May 8, 2015
Comments Received and Responses to Comments

Comment Number	Date	Source	Document Location	Comment	Response
1	3/23/2015	Bill Johns, email	General	If we were building with paper everything would be done. Enough is enough. Diesels temp or permanent. You guys are making it impossible to complete anything with a reasonable cost and timeframe. Stop it!	The Hanford Air Operating Permit (AOP) was created under rules and regulations to implement both the Federal Clean Air Act and the Washington Clean Air Act. Both Acts have numerous parts specific to certain industrial activities (e.g. coal fired power plant, cement kiln, etc...) or specific to types of emission units (e.g. stationary diesel engines). Both Acts also require the creation of a single Permit (the AOP) to contain all of the various and distinct permits a permittee is required to follow. This allows for the permittee, the regulatory agency, and the public to go to one Permit and determine requirements for the site.
2	3/25/2015 to 3/26/2015	Bill Green, email chain	General	<ol style="list-style-type: none">1. I downloaded the documents supporting Revision B to the Hanford Site AOP and noticed the Attachment 2 file appeared unchanged from the version in Revision A. Ecology's public announcement stated the scope of Revision B included a new radioactive air emissions license. Would it be possible to get an electronic copy of Health's new license?2. Two of the reasons I am suspicious the included file for Attachment 2 was incorrect are: 1. the date of the signature is August 30, 2013; and 2. the definitions from WAC 246-247 on page 9/843 do not reflect Health's most current rulemaking where the definition of "license" was changed.3. Ecology's announcement (Publication # 15-05-003) specifically states: "the Washington State Department of Health has issued a new radioactive air emissions license." The announcement strongly implies incorporating this new license is a major reason for the revision. Is Ecology's announcement correct?	<p>The FF-01 license from the Department of Health is completed and sent as a unit to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. The mechanism to change the FF-01 license is not part of the AOP process under Washington Administrative Code 173-401. However, if a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP.</p> <ol style="list-style-type: none">1. The Addendum will contain language to incorporate the new WAC language.2. The Department of Health indicated they only update the signature page when they change general conditions. This is a license processing issue and doesn't affect the AOP, so it will not be addressed in the Addendum.3. The Department of Health will examine their license process and evaluate the potential to update the license in some manner to reflect the effective date of the license. This is a license processing issue and doesn't affect the AOP, so it will not be addressed in the Addendum.

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3	4/1/2015	Mike Conlan, email	General	<p>It makes sense to have all the info for air emissions in one database - that really should have been done years ago - government does move at a snail's pace esp. w/pollution issues (lobbyists).</p> <p>Hanford:</p> <ol style="list-style-type: none"> 1) completely clean the Hanford site - 2) don't allow anymore radioactive waste on Hanford - 3) get the radiation out of the ground water seeping into the Columbia! 	<ol style="list-style-type: none"> 1. The Hanford Air Operating Permit covers active emissions to the atmosphere. It is not a Permitting mechanism in and of itself to clean-up the Hanford Site. Other Programs on the Hanford Site (e.g. the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)) are used to clean-up the Hanford Site 2. The Hanford Air operating Permit has no authority over the allowance of radioactive waste on Hanford. It covers any emissions from sources (toxic or radiological) on the Hanford Site. 3. The Hanford Air Operating Permit covers 'air' emissions. Groundwater contamination is covered under other programs (e.g. CERCLA). 4. <p>No changes to the Permit are required.</p>
4	3/18/2015	Reed Kaldor, email comment to Department of Health	FF-01 License, Table 2-1	<p>Thank you for the letter. One thing I noticed is that in the current version of the FF-01 license, EU 1419 in Table 2-1 is identified as J-969W1, I think it should have been J-696W1. This would keep the nomenclature similar to the stack nomenclature when it was EU 62 and make it easier to track the change in the future if needed. Probably not a big deal but I thought I would bring it to your attention.</p>	<p>Please refer to the response to Comment # 2. The correction will be place in the Addendum to Attachment 2.</p>
5	4/23/2015	Bill Green, Comment # 1	General AOP Structure	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>The regulatory structure of this draft AOP is contrary to Clean Air Act (CAA) section 502(b)(5)(E)¹ [42 U.S.C. 7661a (b)(5)(E)] and 40 C.F.R. 70.11 (a), because this structure does not provide Ecology, the sole permitting authority, with the legal ability to enforce all standards or other requirements controlling emissions of radionuclides, a hazardous air pollutant under CAA § 112 [42 U.S.C. 7412].</p>	<p>The commenter is concerned the permitting authority; i.e., Ecology, does not have adequate authority to enforce the radionuclide requirements in a license issued by Health that are part of an air operating permit. This issue was previously raised in inquiries to the United States Environmental Protection Agency (EPA) and the Washington State Department of Health. Those agencies responded to the inquiry in letters dated October 11, 2012 and July 16, 2010 which are attached as Exhibit A and B respectively.</p> <p>This issue was also raised and responded to by the EPA in their order granting in part and denying in part two petitions for objection to permits (attached as Exhibit X).</p> <p>Please see Exhibit A at p. 1-4; Exhibit B at p. 3, Issue 1, Exhibit X at p. 12 - 13 Claim 1</p> <p>No change in the AOP is required.</p>

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6	4/23/2015	Bill Green, Comment # 2	General AOP Structure	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>The regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to issue a Title V permit containing all standards or other requirements controlling emissions of radionuclides, a hazardous air pollutant under CAA § 112, contrary to Clean Air Act (CAA) section 502 (b)(5)(A)¹ [42 U.S.C. 7661a (b)(5)(A)], 40 C.F.R. 70², and WAC 173-401³.</p>	<p>Please see the response to comment # 5.</p> <p>No change in the AOP is required.</p>
7	4/23/2015	Bill Green, Comment # 3	General AOP Structure	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>The regulatory structure used in this draft AOP does not allow Ecology, the sole permitting authority, to offer for public review AOP terms and conditions controlling Hanford’s radionuclide air emissions, contrary to Clean Air Act (CAA) section 502 (b)(6)¹ [42 U.S.C. 7661a (b)(6)], 40 C. F.R. 70.7 (h)², RCW 70.94.161 (2)(a) & (7)³, and WAC 173-401-800⁴. Nor can Ecology provide for a public hearing on AOP terms and conditions controlling Hanford’s radionuclide air emissions. Radionuclides are a hazardous air pollutant under CAA § 112.</p>	<p>Please refer to Exhibit A, last paragraph of p. 5 -p. 6; Exhibit B, Issue No.2, pp.3-4; Exhibit C,. p.2; and Exhibit X, p. 23</p> <p>The Exhibits specifically address the applicability of public notice requirements to underlying requirements.</p> <p>The FF-01 license from the Department of Health is completed and sent as a unit to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. The mechanism to change the FF-01 license is not part of the AOP process under Washington Administrative Code 173-401. However, if a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP.</p> <p>No change in the AOP is required.</p>
8	4/23/2015	Bill Green, Comment # 4	General AOP Structure	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>Contrary to Clean Air Act (CAA) section 502 (b)(6)¹ [42 U.S.C. 7661a (b)(6)], 40 C.F.R. 70.4(b)(3)(x) and (xii)², and WAC 173-401-735 (2)³, the regulatory structure used in this draft AOP to control Hanford’s radionuclide air emissions does not recognize the right of a public commenter to judicial review in State court of the final permit action.</p>	<p>Please refer to Exhibit A, last paragraph of page 5 and continued onto page 6, Exhibit B, Issue No. 3, pp. 4-5, Exhibit C, p. 1, and Exhibit X, p. 23</p> <p>No change in the AOP is required.</p>

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9	4/23/2015	Bill Green, Comment # 5	General AOP Structure	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>The regulatory structure used in this draft AOP does not require pre-issuance review by a professional engineer or staff under the direct supervision of a professional engineer in the employ of the permitting authority for any term or condition controlling Hanford's radionuclide air emissions, contrary to RCW 70.94.161 (2)(a)¹ and WAC 173-400-700 (1)(b).</p>	<p>A requirement of pre-issuance professional engineer review isn't directly required for underlying conditions (e.g. FF-01 license). The underlying requirements to the Hanford Air Operating Permit (AOP) (e.g. Ecology Approval Orders, Health FF-01 License, etc...) have been finalized prior to revision of the AOP.</p> <p>The FF-01 license from the Department of Health is sent to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. If a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP.</p> <p>The AOP was prepared and will be stamped by a licensed professional engineer in the State of Washington who is in the employ of the Department of Ecology.</p> <p>No change in the AOP is required.</p>
10	4/23/2015	Bill Green, Comment # 6	General AOP Structure	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>In this draft Hanford Site AOP, regulate radionuclide air emissions in accordance with WAC 173-400 rather than in accordance with WAC 246-247. Radionuclides regulated as an applicable requirement under WAC 173-401, require pre-issuance review by the public, affected states, and EPA; are subject to judicial review by the Pollution Control Hearings Board; and can be enforced by Ecology; all of which satisfy requirements of the Clean Air Act. Radionuclides regulated pursuant to WAC 246-247 cannot satisfy these CAA requirements.</p>	<p>Please see the response to Comment # 7, Exhibit A, last paragraph of p. 5 -p. 6; Exhibit B, Issue No.2, pp.3-4; Exhibit C., p.2, and Exhibit X Page 23^[PMG1].</p> <p>The FF-01 license from the Department of Health is sent to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. If a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP.</p> <p>No change in the AOP is required.</p>
11	4/23/2015	Bill Green, Comment # 7	General AOP structure, Attachment 2, License FF-01	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>In this draft Hanford Site AOP regulation of radionuclides is inappropriately decoupled from 40 C.F.R. 70 (Part 70). Regulation of radionuclides occurs pursuant to a regulation that does not implement Part 70, is not authorized by EPA to implement Part 70, and cannot be enforced by Ecology, the issuing permitting authority.</p>	<p>Please refer to Exhibit A and Exhibit X.</p> <p>No change in the AOP is required.</p>

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12	4/23/2015	Bill Green, Comment # 8	General AOP, Attachment 1, and Attachment 2, License FF-01	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>Provide an accurate inventory of regulated air pollutants expected from Tank Farm point sources and fugitive sources that is consistent with the findings of the Hanford Vapor Report¹.</p>	<p>The data presented in the Hanford Tank Vapor Assessment Report (TVAR) is not being questioned, but the applicability or relevancy of the data to the Federal Clean Air Act and the Washington Clean Air Act is not clear as the data is lacking important meta-data (e.g. where was the sample collected, how was the sample collected, what protocols were used for sample collection, etc.).</p> <p>Ecology doesn't have access to the actual data presented in the TVAR and can only depend on the information as presented in the report. This raises a question on how relevant the data are for use in determining ambient air concentration data to be compared to acceptable source impact level (ASIL) values of Washington Administrative Code 173-460.</p> <p>The objective of the Hanford Tank Vapor Assessment Team is stated on page 12 of 153 of the TVAR as "WRPS asked the Savannah River National Laboratory (SRNL) to assemble and lead the Hanford Tank Vapors Assessment Team (TVAT) 2014 to determine the adequacy of the established WRPS program and prevalent site practices to protect workers from adverse health effects of exposure to the chemical vapors on the Hanford tank farms." [emphasis added]</p> <p>Approval Orders incorporated into the AOP were issued under the Clean Air Act (CAA) and its amendments regulating ambient air. Ambient air is defined in 40 CFR Part 50.1 (e) as "... that portion of the atmosphere, external to buildings, to which the general public has access." [emphasis added] In addition, WAC 173-460-070 requires compliance with the state TAPs requirements to be demonstrated "in any area to which the applicant does not restrict or control access." The Hanford site is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers. The air at the Hanford Site doesn't qualify as ambient air. Therefore, the State TAP requirements need not be met within the boundaries of the Hanford Site. However, on-site personnel are covered by other laws, rules, and regulations in regards to their safety.</p> <p>As stated in WAC 173-401-100 (2), "[a]ll sources subject to this regulation {operating permit regulation} shall have a permit to operate that assures compliance by the source with all applicable requirements." Each Notice of construction in the AOP as an applicable requirement was evaluated at the time of issuance for conformance with all applicable requirements. AS the underlying requirements meet the condition for inclusion in the AOP, no change is needed to the AOP.</p>

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13	4/23/2015	Bill Green, Comment # 9	General AOP, Attachment 1, and Attachment 2, License FF-01	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>Reopen Hanford's AOP in accordance with 40 C.F.R. 70.7 (f)(1)(iii) & (iv) and revise Tank Farm emission limits, monitoring, and sampling to be consistent with the regulated air pollutants expected pursuant to the Hanford Vapor Report (W.R. Wilmarth et al., Hanford Tank Vapor Assessment Report, SRNL-RP-2014-00791, Oct. 30, 2014)¹. The Hanford Vapor Report establishes that all previous estimates of emissions by the permittee understated both the number of regulated air pollutants and the concentration of these regulated air pollutants in Tank Farm emissions from both point sources and from fugitive sources. Absent an accurate assessment of emissions, Ecology cannot establish appropriate emission controls, emissions limits, and monitoring, reporting, and recordkeeping conditions that assure continuous compliance with requirements of the federal Clean Air Act (CAA).</p>	<p>Please see response to comment # 12.</p> <p>Additionally, as the commenter states, the Notice of Endangerment and Intent to File Suit (NOI) was being done under the Resource Conservation and Recovery Act (RCRA) for worker endangerment. It was not filed under the Clean Air Acts (Federal and State) because the CAAs regulated ambient air and the workers are not in ambient air as explained in comment # 13.^[PMG2]</p> <p>No change to the permit is needed.</p>
14	4/23/2015	Bill Green, Comment # 10	General AOP, Attachment 1, and Attachment 2, License FF-01	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>Supply a <i>schedule of compliance</i>¹ as required by 40 C.F.R. 70.6(c)(3) and WAC 173-401-630 (3) for establishment of monitoring and for identification and control of emissions of previously unaccounted for <i>hazardous air pollutants</i> (HAPs) and <i>toxic air pollutants</i> (TAPs), including those associated with transient peaks in release rates from Tank Farm emissions units. Also, in accordance with 40 C.F.R. 70.7 (h) and WAC 173-401-800, provide the public with the opportunity to review the schedule of compliance, and any resulting applicable requirements Ecology incorporates into the Hanford Site AOP.</p>	<p>Please see response to comment # 12 and # 13.</p> <p>Additionally, the underlying Notice of Construction for emissions incorporated into this AOP as applicable requirements considered the emissions for the discharge point covered by that NOC. The impact to <i>ambient air</i> was evaluated at that time using modeled impacts to the ambient air from the best available sample data and application of conservative assumptions. From this evaluation an Approval Order was issued to the Permittee to operate the emissions point.</p> <p>A schedule of compliance is not required as hazardous air pollutants (HAPs) and toxic air pollutants (TAPs) have not reached ambient air in concentrations requiring action or have already been assigned permit conditions in the underlying applicable requirement (e.g. NOC permit). WAC 173-460-150 is used with HAPs and TAPs to determine the when modeling is required. The process in WAC 173-460 have been followed for NOC issued permits that have become incorporated into this AOP as applicable requirements. As such, the individual permits have already established and addressed HAPs and TAPs and the permittee is required to follow those requirements.</p> <p>With the permittee following the requirements of the underlying NOC permits, they do not need to supply a schedule of compliance.</p> <p>No change to the permit is needed.</p>

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15	4/23/2015	Bill Green, Comment # 11	General AOP, Attachment 1, and Attachment 2, License FF-01	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>Provide emission limits, and associated monitoring, reporting, and recordkeeping requirements sufficient to assure continuous compliance with any requirements for control of all regulated air pollutants anticipated by the Hanford Vapor Report¹ and expected from Tank Farm emissions units².</p>	<p>Please see response to comments #12, #13, and # 14.</p> <p>Additionally, the requirements for monitoring, reporting, and recordkeeping is specific to each emission unit and related to the type of emission being monitored. Each emission unit has the appropriate monitor requirements in the issued permit for that unit. These requirements become part of the AOP monitoring, reporting, and record keeping requirements. As such, each emission unit is currently properly monitoring, reporting, and recordkeeping emission data. It is agreed that certain emission units have different points of compliance (e.g. opacity at the stack, HAPS and TAPS in ambient air, etc...), but these are addressed in the NOC permit and the AOP.</p> <p>The commenter provides the definition of a person, then states "... without reference to the location of that "person" when harmed". However the citation of 42 USC 4713 [CAA § 113] states "... who negligently release into the ambient air any hazardous air pollutant..." [emphasis added]. Ambient air has been defined previously (see comment # 13) and ambient air is a location. Those the CAA protects people <i>located</i> in ambient air.</p> <p>Ecology agrees with the commenter that permits must "... be adequate to determine whether any hazardous air pollutant or extremely hazardous air pollutant released into the environment could harm any "person". But this is applicable to ambient air and the current monitoring, reporting, and recordkeeping meets this requirement.</p> <p>No change in the permit is required.</p>
16	4/23/2015	Bill Green, Comment # 12	General AOP, Standard Terms and General Conditions Section 5.27 and Table 5-1, Attachment 1, and Attachment 2, License FF-01	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>This draft Hanford Site AOP omits regulation of radon, the only radionuclide identified by name as a <i>hazardous air pollutant</i> in section 112 of the <i>Clean Air Act</i> (CAA).</p>	<p>Radon has not been overlooked, WAC 246-247-020 (4) and 40CFR61.91(a) (both referenced in the General Conditions of Attachment 2) allow the exclusion of naturally occurring radon and its respective decay products unless the concentrations or rates of emissions have been enhanced by industrial processes. For example the 325 building has a radon generator as part of its licensed process (see EU ID 361) and radon emission are tracked and reported.</p> <p>Also see Exhibit X page 26 - 29</p> <p>No change in the AOP is required.</p>

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17	4/23/2015	Bill Green, Comment # 13	general AOP, <i>Standard Terms and General Conditions, Attachment 1</i> , and <i>Attachment 2</i> , License FF-01	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>This draft Hanford Site AOP overlooks the Columbia River as a source of Hanford’s diffuse and fugitive emissions of radionuclides.</p>	<p>Under WAC 246-247, all registered and any unregistered sources of radioactive air emissions are monitored by DOE using ambient air samplers as described in Section 5 of Attachment 2 (FF-01). DOE reports the results of this monitoring program in the annual air emissions report. As a result of this monitoring, the Columbia River is not deemed a credible source of radionuclide air emissions. The Department of Health has submitted a request to DOE to determine if this concern is valid.</p> <p>From Exhibit X, p.28.</p> <p>With regard to the Petitioner’s claim that the Columbia River should be regulated as a source of radionuclides in the Hanford Title V Permit, the Petitioner has not demonstrated that the permit unlawfully “overlooks the Columbia River as a source of diffuse and fugitive emissions of radionuclides” that must be regulated under the Hanford Title V Permit. By its terms, Subpart H applies to operations at DOE “facilities,” which is defined as “all buildings, structures and operations on one contiguous site.” 40 C.F.R. § 61.91(b). The Columbia River is not a building, structure or operation and thus not part of the DOE facilities subject to Subpart H. Moreover, the Hanford Site is regulated as a “major source” under the title V program. “Major source” is defined in the Part 70 regulations in part as “any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control (or persons under common control))....” 40 C.F.R. § 70.2; <i>see also</i> W.A.C. 173-401-200(34). “Stationary source,” in turn, is defined as building, structure, facility or installation that emits or may emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act.” 40 C.F.R. § 70.2; <i>see also</i> W.A.C. 173-401-200(19). The Petitioner has not demonstrated that the Columbia River is a stationary source under common control with DOE and we see no reason to conclude that it is part of the title V major source subject to the title V permit for the Hanford Site.</p> <p>No change in the AOP is required.</p>

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18	4/23/2015	Bill Green, Comment # 14	<i>Standard Terms and General Conditions</i> , Section 4.6, pg. 13 of 53	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . Clarify <i>Section 4.6. Enforceability</i>. Federally-enforceable requirements include any requirement of the CAA, or any of its applicable requirements, including CAA § 116 [42 U.S.C. 7416] and any requirements in 40 C.F.R. 70.	The WAC 173-401 has been federally approved and is therefore federally enforceable. As such, the WAC citations in Section 4.0 and 5.0 of the permit are federally enforceable, unless it specifically states it is State only (e.g. Section 4.12 has "{ ... RCW 70.94.221 (State only)}]. As the WAC citations are federally enforceable, unless stated as "State only", no change in the permit is required.
19	4/23/2015	Bill Green, Comment # 15	<i>Standard Terms and General Conditions</i> , Section 4.12, pg. 14 of 53	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . Specify the appeal process applicable to AOP terms and conditions in <i>Attachment 2</i> that are created and enforced by Health pursuant to RCW 70.98 and the regulations adopted thereunder.	The appeal process for the AOP is presented in section 4.12 of the Standard Terms and General Conditions and Attachment 2 is part of the AOP. The FF-01 license, which is Attachment 2, from the Department of Health is sent to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. If a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP. Thus appeals of the AOP, Attachment 2, for failure to incorporate Federal Requirements would be resolved in the Addendum of Attachment 2. No change in the AOP is required.
20	4/23/2015	Bill Green, Comment # 16	<i>Standard Terms and General Conditions</i> , Section 5.19, pg. 28 of 53	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . State that changes allowed by sections 5.19 and 5.20 only apply to <i>Attachment 1</i> and <i>Attachment 3</i>. The statute and the regulation under which <i>Attachment 2</i> was created do not recognize either "Off-permit Changes" or "Changes Not Requiring Permit Revisions"	Ecology agrees. The language will be changed to: 5.19.1 The source shall be allowed to make changes to Attachment 1 not specifically addressed or prohibited by the permit terms and conditions without requiring a permit ..." "5.20.1 Permittee is authorized to make the changes described in this section to Attachment 1 without a permit revision, providing the following conditions are met"
21	4/23/2015	Bill Green, Comment # 17	<i>Standard Terms and General Conditions</i> , Section 5.19.3, pgs. 28 & 29 of 53	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . After line 39 on page 28 add the phrase "or other such address as provided by Ecology". After the EPA address on page 29 add the phrase "or other such address as provided by EPA". These additions will avoid a technical violation should either Ecology or EPA change addresses during the term of the AOP	Ecology agrees. The language will be changed to: On page 28, lines 33 and 34 "Notification shall be submitted to Ecology to the address below or as provided by Ecology:" On page 28, line 41 "and EPA Region 10 to the address below or as provided by Ecology or EPA:"

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22	4/23/2015	Bill Green, Comment # 18	<i>Standard Terms and General Conditions</i> , Section 5.20.1, pg. 29 of 53	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . After Ecology’s address, add the phrase “or other such address as provided by Ecology”. After the EPA address, add the phrase “or other such address as provided by EPA”. These additions will avoid a technical violation should either Ecology or EPA change addresses during the term of the AOP.	Ecology agrees. The language will be changed to: On page 29, lines 30 and 31 “Notification shall be submitted to Ecology to the address below or as provided by Ecology:” On page 29, line 38 “and EPA Region 10 to the address below or as provided by Ecology or EPA:”
23	4/23/2015	Bill Green, Comment # 19	<i>Attachment 1</i> , Table 1.4, Marshalling Yard fugitive dust control	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . Missing from Table 1.4 are conditions from BCAA Administrative Order (AO) of Correction, No. 20030006, for control of fugitive dust from the Marshalling Yard. Requirements from this AO survive for at least as long as the Marshalling Yard exists. According to EPA, requirements in an AO are to be treated as “applicable requirements” under Title V that must be included in a source’s AOP.	The dust control requirements are found in the terms of the underlying requirement in Approval Order DE02NWP-002, Amendment 4. DE02NWP-002, Amendment 4 states a dust control plan shall be “developed and implemented”. Additionally, the dust control plan “shall be made “available to Ecology upon request.” <div style="background-color: #f8d7da; padding: 5px;">This issue was also heard and resolved by the Environmental Hearings Office, PCHB NO. 07-012, p. 15 and 16.[PMG3]</div> No change in the AOP is required.
24	4/23/2015	Bill Green, Comment # 20	<i>Attachment 1</i> and public review file	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . Missing from the public review file is Dust Control Plan 24590-WTP-GPP-SENV-015, Revision 1, <i>Fugitive Dust Control</i>. Pursuant to 40 C.F.R. 70.7 (h)(2), all information Ecology deemed to be relevant by using it in the permitting process must be made available to support public review	Please see response to comment # 23. Additionally, with the he dust control plan requirements found in the terms of the underlying requirement to the Air Operating Permit (AOP) in Approval Order DE02NWP-002, Amendment 4, the information used and deemed relevant and used in the permitting process was included in the original public comment period. The dust control plan is the permittee’s document and under their direct control. The permittee updates the dust control plan as required for activities being performed. As such, the dust control plan does not become a direct permit document in the AOP. Because the document is not directly in the AOP and wasn’t used as supporting material in the issuance of the AOP, no requirement exists to provide the dust control plan for public review at this time. No change in the AOP is required.

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25	4/23/2015	Bill Green, Comment # 21	<i>Attachment 1</i> , Section 1.1, pg. 8, line 6	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . Correct “emission units” to read “emissions unit”. It is “Emissions unit” that is defined in WAC 173-401-200 (12).	Ecology offers the following explanation. Ecology agrees the defined term in Washington Administrative Code (WAC) 173-401-200 (12) is “emissions unit”. The statement was intended to convey to all of the multiple units on the site. Ecology will change the language from “emission units” to “emissions units”
26	4/23/2015	Bill Green, Comment # 22	<i>Attachment 1</i> , Section 1.2, pg. 11, lines 9-11	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . Delete the sentence beginning on line 9: “All emission units not identified in Section 1.4 Discharge Points that are subject to 40 CFR 61, Subpart H in Attachment 2, Health License, have been determined to represent insignificant sources of non-radioactive regulated air pollutants”. Ecology can not use a permit to revise a regulation¹, specifically WAC 173-401-530 (2)(a).	The sentence was intended to convey that discharge points not listed in Section 1.4 do not need compliance certification for non-radiological emissions. As it appears some confusing might be present in the current language, the second sentence of the paragraph will be changed to, “[f]or these emission units no additional monitoring, reporting, or recordkeeping is necessary beyond the requirements in Attachment 2. ” For radiological emissions units, this sentence will guide the reader to Attachment 2 as the rest of the paragraph states.
27	4/23/2015	Bill Green, Comment # 23	<i>Attachment 1</i> , Section 1.2 “Insignificant Emission Units”	Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D . Re-evaluate Tank Farm emissions units¹ currently designated as insignificant emissions units (IEUs) based on requirements of WAC 173-401-530 (2)(a) and on findings in the Hanford Vapor Report².	The Tank Farm emissions have not been categorically designated as insignificant emission units. Section 1.4.25 and 1.4.26 are both permits for Tank Farm emissions units. Tank farm emissions have been and are evaluated against WAC 173-400, <i>General Standards for Air Pollution Sources</i> , to determine if they need to have a Notice of Construction Approval Order (permit) issued for their emissions. For Tank Farm emissions requiring an NOC permit, a permit is issued following the regulations of WAC 173-400. Upon issuance, the permit becomes a applicable requirement and is added to the AOP. No permit change is required.

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28	4/23/2015	Bill Green, Comment # 24	Attachment 1, Section 1.4.25, pg. 84, Discharge Point: Ventilation Systems for 241-AN and 241AW-Tank Farms, and Section 1.4.32, pg. 110, Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>Revise the emission limits, and requirements for monitoring, reporting, and recordkeeping for these discharge points (collectively “exhausters”) to reflect findings in the Hanford Vapor Report¹. (See Enclosure 2)</p>	<p>Please see the responses to comments #12, # 13, # 14, and # 15.</p> <p>Ecology is not disputing the Hanford Tank Vapor Assessment Report, but its application to Clean Air Act regulations and permits is not directly applicable. The units in question have been issued a permit conforming to the requirements of WAC 173-400. The permittee submitted an application requesting the permit that gave the basis for the emission data, the conditions the units would operate under, and the concentration of Hazardous Air Pollutants in ambient air. Where this value exceeded the Acceptable Source Impact Level, the permittee installed abatement control device(s) or request a second tier evaluation of the emissions (see WAC 173-460). From this data and analysis, the permit conditions were developed.</p> <p>As long as the Permittee complies with the Permit and the application conditions used to provide operating conditions, no need exists to revise the emission limits, requirements for monitoring, reporting, or recordkeeping.</p> <p>No permit change is required.</p>
29	4/23/2015	Bill Green, Comment # 25	Attachment 2, General	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>Address federally-enforceable requirements as specified in WAC 173-401-625, 40 C.F.R. 70.6 (b), and CAA § 116.</p>	<p>Federally-enforceable requirements are identified in various sections of Attachment 2. Under the “General Requirements” both Subpart A and H of the 40 CFR 61 are identified. The issue of the format or method of citing applicable legal authority was also heard and resolved by the Environmental Hearings Office, PCHB NO. 07-012, pps. 10-14^[PMG4]</p> <p>The FF-01 license from the Department of Health is sent to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. If a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP.</p> <p>As the WAC citations are federally enforceable, unless stated as “State only”, no change in the permit is required.</p> <p>No change in the AOP is required.</p>

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30	4/23/2015	Bill Green, Comment # 26	<i>Attachment 2, General</i>	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>In <i>Attachment 2</i>, provide the specific monitoring, reporting, and recordkeeping requirements needed to demonstrate continuous compliance with each term or condition that appears in the annual compliance certification report required by 40 C.F.R. 70.6 (c)(5) and WAC 173-401-615 (5).</p>	<p>Attachment 2 of the AOP contains generic monitoring, reporting, and recordkeeping requirements at the start of the attachment. It also has specific monitoring and measuring listed for each emission unit.</p> <p>Monitoring, reporting, and recordkeeping is also found in the Standard Terms and General Requirements of the AOP. The AOP as a whole contains the basis for certification of the Hanford Site emissions. The Permittee has been submitting required annual certification and the Department of Health has never indicated that the permittee has failed to demonstrate compliance.</p> <p>No change in the AOP is required.</p>
31	4/23/2015	Bill Green, Comment # 27	<i>Attachment 2, General</i>	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>Track and report the total potential radionuclide emissions allowed from individual emissions units specified in <i>Attachment 2, Enclosure 1 Emission Unit Specific License</i>.</p>	<p>Attachment 2 is created under the authority of WAC 246-247 and WAC 246-247 does not require the sum of all potentials-to-emit radionuclides. As no regulatory basis exists to require the summation, it will not be added as a permit condition.</p> <p>No change in the AOP is required.</p>
32	4/23/2015	Bill Green, Comment # 28	<i>Attachment 2, General</i>	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit <u>D</u>.</p> <p>As required by 40 C.F.R. 70.7 (h)(2), provide the public with all information used in the permitting process to justify:</p> <ul style="list-style-type: none"> • adding six (6) new emission unit, • removing nine (9) emissions units, and • replacing about twenty-eight (28) Notice of Construction (NOC) orders of approval <p>from the previous final version of <i>Attachment 2</i>¹, and restart public review.</p>	<p>Attachment 2 is created under the authority of WAC 246-247 and provided to Ecology as a whole. Ecology accepts the FF-01 license “as-is” and will review it to see if any information needs to be added to the Addendum to Attachment 2. Thus all of the information used to create the permit was provided to the public during the public comment period.^[PMG5]</p> <p>No requirement exists in WAC 246-247 for justifying changes in the FF-01 license. The Department of Health created a “Table of Changes” in the FF-01 License to provide a brief description of changes (starting page 23 of Attachment 2) in an effort to provide the reader with a path to request more information if needed. This is an effort to reduce the burden on the reader to allow them to request more information on specific items of interest,</p> <p>No change in the AOP is required.</p>

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33	4/23/2015	Bill Green, Comment # 29	<i>Attachment 3, General</i>	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>The regulatory structure of the draft Hanford Site AOP does not provide Ecology, the sole permitting authority, with the legal ability to enforce the “National Emission Standards for Asbestos” (40 C.F.R. 61 subpart M). In this draft AOP asbestos requirements are created and enforced in accordance Benton Clean Air Agency (BCAA) Regulation 1, Article 8. Ecology can not enforce or otherwise act on BCAA regulations.</p>	<p>Please see response to Comments #5, #6, and #7 for background information.</p> <p>The Department of Ecology has the authority to enforce the 40 CFR 61, subpart M. Attachment 3 for the Benton Clean Air Agency is similar to the inclusion of the FF-01 license from the Department of Health. It is added as an applicable requirement to the AOP. The BCAA Regulation 1, Article 8, is not enforceable by Ecology, but Ecology has authority to enforce the NESHAP.</p> <p>As Ecology has authority to enforce 40 CFR 61, subpart M, no change is required in the AOP.</p>
34	4/23/2015	Bill Green, Comment # 30	<i>Statement of Basis for Standard Terms and General Conditions, Renewal 2, Revision B, pg. iv, line 1)</i>	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>Line 1 on page iv of the Statement of Basis for Standard Terms and General Conditions contains the following statement: “Health regulates radioactive air emissions under the authority of RCW 70.92, . . .”. Citing to RCW 70.92 is incorrect. The title of RCW 70.92 is “PROVISIONS IN BUILDINGS FOR AGED AND HANDICAPPED PERSONS”.</p>	<p>Ecology agrees:</p> <p>Line 1 on page iv of the Statement of Basis for Standard Terms and General Conditions will be changed from: “Health regulates radioactive air emissions under the authority of RCW 70.92, . . .”. to “Health regulates radioactive air emissions under the authority of RCW 70.98 and 70.94....”</p>

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35	4/23/2015	Bill Green, Comment # 31	Statements of Basis; general):	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>Missing from the Statements of Basis is a discussion of the factual and legal basis for not including the Bechtel National, Inc., dust control plan in the draft Hanford Site AOP. This dust control plan for the Marshalling Yard, and the federal applicable requirements contained therein, is required by Administrative Order (AO) of Correction, No. 20030006, issued by the Benton Clean Air Agency on March 12, 2003.</p>	<p>The <i>Dust Control Plan for the WTP Construction Site</i> (24590-WTP-GPP-SENV-015) was originally prepared December 23, 2002 to meet DE02NWP-002, Condition 8.1. The original DE02NWP-002 did not include the WTP Marshalling Yard.</p> <p>On March 21, 2003, a separate <i>WTP Marshalling Yard Dust Control Plan</i> was developed in response to a BCAA letter.</p> <p>In 2006, Ecology incorporated the WTP Marshalling Yard into DE02NWP-002 via Amendment 4 in response to a public comment made during review of AOP 00-05-006, Renewal 1. Separate dust control plans for both WTP locations continued to be implemented.</p> <p>On March 3, 2010, the above Dust Control Plans were consolidated into one plan with issuance of 24590-WTP-GPP-SENV-015, Revision 1, <i>Fugitive Dust Control</i>.</p> <p>The issuance of Renewal 2 of the Hanford AOP occurred on April 1, 2013. The issuance of an AOP renewal is akin to issuing a brand new permit. As the dust control plan was resolved in Renewal 1 of the AOP, when Renewal 2 was issued it was no longer necessary to explain in Renewal 2's Statement of Basis information about the Marshalling Yard dust control plan.</p> <p>No change is required to the permit or Statement of Basis.</p>
36	4/23/2015	Bill Green, Comment # 32	Statements of Basis; general	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>Missing from the Statements of Basis is the memorandum of understanding between Ecology and Health describing the roles and responsibilities of each agency in coordinating the regulation of Hanford's radionuclide air emissions. This memorandum of understanding¹ is referenced on page 4 of the legal opinion² required by 40 C.F.R. 70.4 (b)(3).</p>	<p>The responsibilities for each Agency (e.g Ecology and Health) regulating the Hanford Site is established in WAC 173-401 and WAC 246-247. Additionally, the specific of how each office interacts with each other is not defined by the referenced Memorandum of Understanding.^[PMG6]</p>
37	4/23/2015	Bill Green, Comment # 33	Statements of Basis; general	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>Contrary to 40 C.F.R. 70.7 (a)(5) and WAC 173-401-700 (8), the permitting authority failed to address the legal and factual basis for regulating radioactive air emissions in the draft Hanford Site AOP pursuant to <i>The Nuclear Energy and Radiation Act</i> (NERA) rather than in accordance with the <i>Clean Air Act</i> (CAA).</p>	<p>Please see Exhibit A and Exhibit X.</p> <p>No change is required.</p>

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38	4/23/15	Bill Green, Comment # 34	Statements of Basis; general	<p>Ecology is only showing the first paragraph of this comment in this summary. For the complete comment with all citations, footnotes, and explanations, please refer to Exhibit D.</p> <p>In accordance with 40 C.F.R. 70.7 (a)(5) and WAC 173-401-700 (8), provide the legal and factual basis for omitting the Columbia River as a source of radionuclide air emissions.</p>	<p>Please see exhibit X, specifically “With regard to the Petitioner’s claim that the Columbia River should be regulated as a source of radionuclides in the Hanford Title V Permit, the Petitioner has not demonstrated that the permit unlawfully “overlooks the Columbia River as a source of diffuse and fugitive emissions of radionuclides” that must be regulated under the Hanford Title V Permit. By its terms, Subpart H applies to operations at DOE “facilities,” which is defined as “all buildings, structures and operations on one contiguous site.” 40 C.F.R. § 61.91(b). The Columbia River is not a building, structure or operation and thus not part of the DOE facilities subject to Subpart H. Moreover, the Hanford Site is regulated as a “major source” under the title V program. “Major source” is defined in the Part 70 regulations in part as “any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control (or persons under common control))....” 40 C.F.R. § 70.2; <i>see also</i> W.A.C. 173-401-200(34). “Stationary source,” in turn, is defined as building, structure, facility or installation that emits or may emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act.” 40 C.F.R. § 70.2; <i>see also</i> W.A.C. 173-401-200(19). The Petitioner has not demonstrated that the Columbia River is a stationary source under common control with DOE and we see no reason to conclude that it is part of the title V major source subject to the title V permit for the Hanford Site.”</p> <p>No change in the permit is required.</p>
39	5/6/15	Jeanne Poirier, email	General	<p>Please add my name to the concerned citizens living in proximity to Hanford.</p> <p>While a challenge for clean up, please adhere to EPA rules on clean air standards.</p> <p>Good monitoring of potentially harmful emissions is critical to safety at Hanford.</p>	<p>Ecology offers the following explanation.</p> <p>Ecology is following the requirements of the Federal and Washington Clean Air Acts in regulating the Hanford Site. Ecology strives to uniformly apply these regulations, regardless of the Permittee’s size, location, ownership (e.g. Government or Private), or activity being regulated.</p> <p>No change to the Permit is required.</p>

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40	5/6/15	Jean Vanni, email	General	I'm requesting that Ecology explain what are the PTE zones and how their analysis is performed and include a map within the AOP	<p>The PTE zones are derived from model results for specific discharge points or emissions units. These results are used to determine levels of risk and requirements for abatement, monitoring, etc...</p> <p>Ecology and Health regulations do not require the submission of maps with emission applications. As no regulatory basis exists to require the maps, it will not be added as a permit condition.</p> <p>No change in the AOP is required.</p>
41	5/6/15	DOE, integrated comment # 1	Standard Terms and Conditions, Section 5.9	Item a. in this section refers to Attachment 1, Section 2.4 but it appears the reference should be to Section 1.4.	<p>Ecology offers the following explanation.</p> <p>Ecology agrees the referenced sections should be "Section 1.4" and. the text has been corrected.</p>
42	5/6/15	DOE, integrated comment # 2	Attachment 1, Table 1.1, General Standards for Maximum Emissions	Engines that are subject to only NESHAP and NSPS requirements are not subject to opacity requirements.	<p>Ecology offers the following explanation.</p> <p>Washington Administrative Code (WAC) 173-400-040 (1) states, "All sources and emissions units are required to meet the emission standards of this chapter." Engines that are subject to only NESHAP and NSPS are not explicitly excluded from meeting opacity requirements or have specific opacity requirements established for them. As a result, the general requirements of WAC 173-400-40 are applicable.</p> <p>No change is needed to the Air Operating Permit.</p>
43	5/6/15	DOE, integrated comment # 3	Attachment 1, Table 1.1, General Standards for Maximum Emissions	Please clarify what is meant by "certification" in the "Periodic monitoring" column of the SO2 requirement. Is this referring to fuel type certification or engine emission certification?	<p>Ecology offers the following explanation.</p> <p>Ecology agrees the term certification is ambiguous. It was the intent for the certification to be for Ultra Low Sulfur fuel.</p> <p>Ecology is changing the text in the column from "recordkeeping or certification" to "Recordkeeping of the certification that Ultra Low Sulfur Fuel was used."</p>

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44	5/6/15	DOE, integrated comment # 4	Attachment 1, Table 1.1, General Standards for Maximum Emissions	Are either EPA Method 6 or Method 6C appropriate to use for engines? These methods pertain to stack sampling and continuous monitoring. Neither method appears to be appropriate for many of the discharge points in Section 1.4 (e.g., engines that are only subject to the requirements of 40 CFR 63 Subpart ZZZZ).	<p>Ecology offers the following explanation.</p> <p>EPA Method 6 states in 1.2 “Applicability. This method applies to the measurement of sulfur dioxide (SO₂) emissions from stationary sources.” And EPA Method 6C “is a procedure for measuring sulfur dioxide (SO₂) in stationary source emissions using a continuous instrumental analyzer.”</p> <p>Both of the EPA Methods are for use with stationary sources and all of the discharge points in the Hanford Air Operating Permit are stationary sources. As a result, the EPA Methods are applicable.</p> <p>Please note that the “Test method” column is listed with as having a footnote. The footnote states “The test methods identified in this table are used as compliance verification tools. A frequency is not applicable unless specified in the table.” Thus it isn’t a requirement to perform either of the EPA Methods on a specific periodic basis. By specifying the test method, the Permittee, Ecology, and the General Public is aware of what tests to follow in the case a compliance verification tool is needed.</p> <p>No change to the Permit is required.</p>
45	5/6/15	DOE, integrated comment # 5	Attachment 1, Section 1.2. Insignificant Emission Units	In the first paragraph the sentence “Also the compliance certification is not required for IEUs” has been deleted. This sentence provides important clarification and should be retained.	<p>Ecology offers the following explanation.</p> <p>Ecology will change the text from "Insignificant emission units (IEUs) are listed in the Statement of Basis for this Attachment 1. All IEUs shall maintain compliance with the general standards in Table 1.1.” to “Insignificant emission units (IEUs) are listed in the Statement of Basis for this Attachment 1. All IEUs shall maintain compliance with the general standards in Table 1.1, but compliance certification is not required for IEUs”</p>

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46	5/6/15	DOE, integrated comment # 6.	Attachment 1, Section 1.4, Discharge Points	The introductory text to this section states “all emission units identified in this Section are subject to the general requirements listed in Table 1.1.” It is believed that some of the requirements in Table 1.1 (in particular opacity and sulfur dioxide) are not intended to be specifically applied to certain discharge points in Section 1.4. (See comment 2 above) Please clarify the introductory text as appropriate.	<p>Ecology offers the following explanation.</p> <p>Please see responses to Ecology Comment # 42, 43, 44, and 45. The general requirements are applicable requirements for all Section 1.4 Discharge Points. Washington Administrative Code (WAC) 173-400-040 (1) states, "All sources and emissions units are required to meet the emission standards of this chapter." {emphasis added}</p> <p>As the requirement applies to all sources, then all sources in section 1.4 are subject to the general requirements.</p> <p>No change to the permit is required.</p>
47	5/6/15	DOE, integrated comment # 7.	Attachment 1, Section 1.4.23, Discharge Point: P-WTP-001	13-NWP-043 (dated April 24, 2013) transmitted Approval Order DE02NWP-001, Revision 2 to the Office of River Protection. The letter stated that the Order would be incorporated into the first revision of AOP Renewal 2. The Order has yet to be incorporated. Please incorporate Approval Order DE02NWP-001, Revision 2, into AOP Renewal 2, Revision B. (Specific comments are noted below.)	<p>Ecology offers the following explanation.</p> <p>Ecology agrees that all of the changes in Approval Order DE02NWP-001, Rev. 2 and PSD-02-01, Amendment 3, were not incorporated. See Ecology Comments 48 through 69 for details.</p>
48	5/6/15	DOE, integrated comment # 7a.	Attachment 1, Page 67, 1.4.23 Discharge Point: P-WTP-001, Requirement Citation	PSD-02-01 is currently Amendment 3 (not Amendment 2)	<p>Ecology offers the following explanation.</p> <p>Ecology agrees. The Requirement Citation was changed from “Amendment 2” to “Amendment 3”</p>
49	5/6/15	DOE, integrated comment # 7b.	Attachment 1, Page 67, 1.4.23 Discharge Point: P-WTP-001, FUGITIVE DUST CONTROL	Fugitive Dust Control is covered under Section 9.8 (not 8.1) of the DE02NWP-002, Rev. 2 Permit Conditions.	<p>Ecology offers the following explanation.</p> <p>Ecology agrees. The section reference has been changed to "9.8"</p>
50	5/6/15	DOE, integrated comment # 7c.	Attachment 1, Page 67, 1.4.23 Discharge Point: P-WTP-001, FUGITIVE DUST CONTROL, second sentence	“Marshaling Yard” is no longer a term used to describe the BNI material storage area. The current term is “Material Handling Facility” or “MHF”.	<p>Ecology offers the following explanation.</p> <p>Ecology agrees. The term "Marshaling Yard" has been changes to "Material Handling Facility"</p>
51	5/6/15	DOE, integrated comment # 7d.	Attachment 1, Page 67, 1.4.23 Discharge Point: P-WTP-001, Opacity	Opacity is covered under Section 2.1 (not 1.3) of the DE02NWP-002, Rev. 2 Permit Conditions.	<p>Ecology offers the following explanation.</p> <p>Ecology agrees. The section reference has been changed to "2.1".</p>
52	5/6/15	DOE, integrated comment # 7e.	Attachment 1, Page 68, 1.4.23 Discharge Point: P-WTP-001, Opacity	Opacity is covered under Section 2.1 (not 1.3) of the DE02NWP-002, Rev. 2 Permit Conditions.	<p>Ecology offers the following explanation.</p> <p>Ecology agrees. The section reference has been changed to "2.1".</p>

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53	5/6/15	DOE, integrated comment # 7f.	Attachment 1, Page 68, 1.4.23 Discharge Point: P-WTP-001, Opacity	Opacity is covered under Section 2.1 (not 1.3) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 2.1 ".
54	5/6/15	DOE, integrated comment # 7g.	Attachment 1, Page 69, 1.4.23 Discharge Point: P-WTP-001, Condition ULSF	ULSF is covered under Section 2.2 (not 1.4) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 2.2 ".
55	5/6/15	DOE, integrated comment # 7h.	Attachment 1, Page 69, 1.4.23 Discharge Point: P-WTP-001, Condition ULSF	ULSF content is 0.0015% (15 ppm) or less as per the permit conditions in Section 2.2 of the DE02NWP-002, Rev. 2 Permit and Condition 2 of the PSD-02-01 Permit.	Ecology offers the following explanation. Ecology agrees and will change the maximum sulfur content from “0.0030%” to “0.00 15 %”
56	5/6/15	DOE, integrated comment # 7i.	Attachment 1, Page 69, 1.4.23 Discharge Point: P-WTP-001, Fuel Consumption	Fuel consumption for the steam generating boilers is covered under Section 2.3 (not 1.5) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 2.3 ".
57	5/6/15	DOE, integrated comment # 7j.	Attachment 1, Page 71, 1.4.23 Discharge Point: P-WTP-001, NOC	NOC requirements are covered under Section 3.2 (not 2.2) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 3.2 ".
58	5/6/15	DOE, integrated comment # 7k.	Attachment 1, Page 71, 1.4.23 Discharge Point: P-WTP-001, NOC	Do not see Condition 2.3 covered under any sections of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Please see Page 69 of the Air Operating Permit, line items 16-25. No change to the Permit is required.
59	5/6/15	DOE, integrated comment # 7l.	Attachment 1, Page 72, 1.4.23 Discharge Point: P-WTP-001, Performance Demonstration Plan	Performance Demonstration Plan requirements are covered under Section 4.1 (not 3.1) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 4.1 ".
60	5/6/15	DOE, integrated comment # 7m.	Attachment 1, Page 72, 1.4.23 Discharge Point: P-WTP-001, Testing	Testing requirements are covered under Section 4.2 (not 3.2) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 4.2 ".
61	5/6/15	DOE, integrated comment # 7n.	Attachment 1, Page 73, 1.4.23 Discharge Point: P-WTP-001, Startup	Boiler startup requirements are covered under Section 4.5 (not 3.5) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 4.5 ".

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62	5/6/15	DOE, integrated comment # 7o.	Attachment 1, Page 74, 1.4.23 Discharge Point: P-WTP-001, Carbon Monoxide Monitoring	Boiler Carbon Monoxide Monitoring requirements are covered under Section 4.6 (not 3.6) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 4.6 ".
64	5/6/15	DOE, integrated comment # 7p.	Attachment 1, Page 74, 1.4.23 Discharge Point: P-WTP-001, Emission Control Monitoring	Boiler Emission Control Monitoring requirements are covered under Section 5.0 (not 4.) of the DE02NWP-002, Rev. 2 Permit Conditions.	Ecology offers the following explanation. Ecology agrees. The section reference has been changed to " 5.0 ".
65	5/6/15	DOE, integrated comment # 7q.	Attachment 1, Page 75 and 78, 1.4.23 Discharge Point: P-WTP-001, Emergency Generators	PSD Amendment 3, Approval Condition 2, states that the emergency generators be fired by ultra-low sulfur diesel fuel, with a maximum sulfur content of 0.0015 percent by weight (15 ppm), not 0.003% by wt.	Ecology offers the following explanation. Ecology agrees and will change the maximum sulfur content from “0.0030%” to “0.00 15 %”
66	5/6/15	DOE, integrated comment # 7r.	Attachment 1, Page 78, 1.4.23 Discharge Point: P-WTP-001, Emergency Generators	PSD Amendment 3, Approval Condition 2, states: “today’s project consists of eliminating the two Type II emergency diesel generators from the design and replaces them with two turbine generators”.	Ecology offers the following explanation. Ecology agrees. Ecology did find the comment quote in PSD, Amendment 3, as Finding # 5 (in the Findings section) and not in the Approval Condition section. Ecology will change the condition text from “Each Type I or Type II emergency generator shall not exceed 164 hours per year” to “Each Type I emergency generator or turbine generator shall not exceed 164 hours per year when averaged over 12 consecutive months, calculated once per month”
67	5/6/15	DOE, integrated comment # 7s.	Attachment 1, Page 79, 1.4.23 Discharge Point: P-WTP-001, Emergency Generators	Inaccurate condition. Emergency turbine generators shall not exceed 69.8 pounds per hour (each), when averaged over 1-hour and 164 hours per year averaged over 12 consecutive months”, per PSD, Amendment 3, Condition 14.	Ecology offers the following explanation. Ecology agrees. The text will be changed from “Emissions of NO _x from the Type II Generators shall not exceed 547.5 lb/day (each), when averaged over 24 consecutive hours.” to “Emissions of NO _x from the Turbine Generators shall not exceed 69.8 lb/day (each), when averaged over 24 consecutive hours and 164 hours per year averaged over 12 consecutive months. ”
68	5/6/15	DOE, integrated comment # 7t.	Attachment 1, Page 79, 1.4.23 Discharge Point: P-WTP-001, Diesel Fire Water Pumps	PSD Amendment 3, Approval Condition 2, states that the emergency generators be fired by ultra-low sulfur diesel fuel, with a maximum sulfur content of 0.0015 percent by weight (15 ppm), not 0.003% by wt.	Ecology offers the following explanation. Ecology agrees and will change the maximum sulfur content from “0.0030%” to “0.00 15 %”

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69	5/6/15	DOE, integrated comment # 7u.	Attachment 1, Page 80, 1.4.23 Discharge Point: P-WTP-001, Diesel Fire Water Pumps	Inaccurate condition. Diesel Fire Water Pumps hours of operation shall not exceed 230 hours per year averaged over 12 consecutive months, per PSD, Amendment 3, Condition 15.	Ecology offers the following explanation. Ecology agrees. The text will be changed from “Hours of operation for each pump ≤ 110 hours per year averaged over 12 consecutive months.” to “Hours of operation for each pump shall not exceed 230 hours per year averaged over 12 consecutive months.’
70	5/6/15	DOE, integrated comment # 8.	Attachment 1, Section 1.4.34, SST Retrieval Direct Fired Water Heaters	Change the units in the condition for operational limits from “25 mmBtu/hr” to “25 MBtu/hr.” Basis: Consistency with current permit condition.	Ecology offers the following explanation. Ecology agrees and changed the condition units from “mmBtu/hr” to MBtu/hr ”.
71	5/6/15	DOE, integrated comment # 9.	Statement of Basis for Attachment 1, Section 1.4	This section states “This section contains emission unit specific requirements in addition to general standards for maximum emissions.” Please clearly describe how the general standards are to be applied to the specific discharge points, especially for compliance certification.	Ecology offers the following explanation. The Statement of Basis for Attachment 1 sets forth the legal and factual basis for the AOP Attachment 1 conditions, and is not intended for enforcement purposes. The Statement includes references to the applicable statutory or regulatory provisions, technical supporting information on specific emission units, and clarifications of specific requirements. The Statement of Basis is non-enforceable, but is a supporting reference document that provides a rationale for the development of the permit and offers clarification where deemed necessary. From the Hanford AOP, Attachment 1, Section 1.4, states “All emission units identified in this Section are subject to the general requirements listed in Table 1.1. More stringent conditions listed for specific discharge points in this Section are used in lieu of the general requirements” {emphasis added}. As discussed in Ecology response’s 42 through 46, the general conditions apply all of the time. It is not necessary or needed to describe how they are to be applied on a discharge point by discharge point basis. Compliance certification is found in the Standard Terms and General Conditions part of the Hanford Site AOP, Section 5.10. Section 5.10.1 (a) through (e) is specific for “compliance certification will consist of the following:” As the compliance certification is already present in the Hanford Site AOP Standard Terms and General Conditions and general requirements are the minimum emission baseline for all emissions, no change to the Attachment 1 Statement of Basis is required.

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72	5/8/15	Beth Sanders, email	General	<p>I am very concerned about the health and safety of Hanford workers and the public. Chemical vapor exposures are a serious problem at Hanford’s tank farms. Since March of 2014, 36 workers have received medical attention after being exposed to chemical vapors at Hanford.</p> <p>Minimally what is need is better monitoring practices and an accurate inventory of tank farm emission. Otherwise, it is not possible to specify the regulatory and pollution control requirements that are applicable under the Clean Air Act.</p> <p>All sources of air pollution from Hanford need to be accounted for in the AOP. Why do uranium and other regulated pollutants, for example, continue to leach into the Columbia River?</p>	<p>Ecology offers the following explanation.</p> <p>Ecology is also concerned about the health and safety of Hanford Workers. However, the Clean Air Act (CAA) and its amendments regulate ambient air. Ambient air is defined in 40 CFR Part 50.1 (e) as “... that portion of the atmosphere, external to buildings, to which the general public has access.” The workers work on the Hanford site, which is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers. As the Hanford site doesn’t qualify as ambient air, the CAA isn’t applicable; but on-site personnel are covered by other laws, rules, and regulations</p> <p>Monitoring of Double Shell Tank (DST) emissions is performed and sample results analyzed to determine if the emissions are below the permit levels and to determine if any new toxic air pollutants (TAPs) were discovered during the sampling. The Permittee is in compliance with the permit as long as emissions are below permit requirements.</p> <p>All ‘air’ emission sources regulated by the CAA are in the Hanford Air Operating Permit. The ‘leaching’ in the Columbia River is not covered by the CAA (Ecology assumes the use of the word “leach” by the commenter is implying the flow of contaminated groundwater into the Columbia River), but is covered by other programs.</p> <p>No changes to the Permit are required.</p>

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73	5/11/15	Dale Thornton, email	General	<p>The huge size of the Hanford site, the cleanup effort ongoing and the relatively low amount of emissions per acre, square mile, or other measurement factor as compared to a large city such as Seattle, the proposed AOP should be generous in consideration of the progress being made on removing the pollutants. Holding contractors responsible for possible vapor emissions from the dangerous tanks will only slow the progress of emptying those tanks and eliminating the source. The contractors are having enough trouble protecting the workers from the vapors while still trying to make progress on cleanup, they shouldn't need to divert their funding and attention toward accounting for vapors that they have no control over.</p> <p>Please keep the AOP limited to similar levels and limit additional controls to those that are prudent. Adding more and more requirements, the diesel engine requirements and licensing for radiation emissions is simply layering more state government controls on top of existing regulations. This state does not need additional regulations, many regulations are bordering on authoritarian now.</p>	<p>Ecology offers the following explanation.</p> <p>Ecology is following the requirements of the Federal and Washington Clean Air Acts in regulating the Hanford Site. Ecology strives to uniformly apply these regulations, regardless of the Permittee's size, location, ownership (e.g. Government or Private), or activity being regulated.</p> <p>Vapor emissions from the Hanford Tanks are regulated by the CAA when they enter ambient air in sufficient concentration to trigger regulation requirements. However, the Clean Air Act (CAA) and its amendments regulate ambient air. Ambient air is defined in 40 CFR Part 50.1 (e) as "... that portion of the atmosphere, external to buildings, to which the general public has access." The workers work on the Hanford site, which is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers. As the Hanford site doesn't qualify as ambient air, the CAA isn't applicable; but on-site personnel are covered by other laws, rules, and regulations.</p> <p>No changes to the Permit are required.</p>
74	5/8/15	Tom Carpenter, comment # 1	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 1, Section "I. General Air Operating Permit (AOP) Structure", first ¶, first sentence. "The AOP should be structured to provide maximum possible enforcement authority to agencies regulating Hanford's varied sources of air emissions, and to provide the strongest possible standards for protecting health, safety, and the environment."</p>	<p>Ecology is following the requirements of the Federal and Washington Clean Air Acts in regulating the Hanford Site. Ecology strives to uniformly apply these regulations, regardless of the Permittee's size, location, ownership (e.g. Government or Private), or activity being regulated.</p> <p>No change to the Permit is required.</p>
75	5/8/15	Tom Carpenter, comment # 2	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 1, Section "I. General Air Operating Permit (AOP) Structure", first ¶, second sentence. "It {the AOP} should also maximize opportunities for meaningful public involvement."</p>	<p>Ecology is following the requirements of the Federal and Washington Clean Air Acts in regulating the Hanford Site. Ecology strives to uniformly apply these regulations, regardless of the Permittee's size, location, ownership (e.g. Government or Private), or activity being regulated.</p> <p>Public involvement is covered in WAC 173-401-800 and Ecology follows this rule to ensure accurate permitting information is made available to the public in a timely manner.</p>

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76	5/8/15	Tom Carpenter, comment # 3	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 2, Section “I. General Air Operating Permit (AOP) Structure”, third ¶ of the section and first ¶ of the page, last sentence. “This includes regulating the emission of radon gas, which is not addressed by this AOP despite the fact that radon is defined explicitly by section 112 of the CAA as a HAP, and the fact that the permittee has repeatedly acknowledged⁶ that radon is being released in quantities sufficient to measurably increase the dose received by the (off-site) “maximally exposed individual.”⁷”</p>	<p>Please see comment # 16.</p> <p>Radon has not been overlooked, WAC 246-247-020 (4) and 40CFR61.91(a) (both referenced in the General Conditions of Attachment 2) allow the exclusion of naturally occurring radon and its respective decay products unless the concentrations or rates of emissions have been enhanced by industrial processes. For example the 325 building has a radon generator as part of its licensed process (see EU ID 361) and radon emission are tracked and reported.</p> <p>Also see Exhibit X page 26 – 29</p> <p>No change in the AOP is required.</p>
77	5/8/15	Tom Carpenter, comment # 4	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 2, Section “I. General Air Operating Permit (AOP) Structure”, fourth ¶ of the section and second ¶ of the page, last sentence. “While Ecology often passes public comments to the Department of Health for consideration, the public would be better served by review processes protected and required by law than by informal practices.”</p>	<p>Please see responses to Comment # 7 and # 8.</p> <p>The Department of Health follows the rules and regulation governing radiological air emissions. Ecology agrees the Nuclear Energy and Radiation Act (NERA) does not require or authorize public review or public hearings. However, the ability to change NERA rests with the Legislature and Governor of the State of Washington and not with the Department of Health.</p> <p>No change in the AOP is required.</p>
78	5/8/15	Tom Carpenter, comment # 5	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 2, Section “I. General Air Operating Permit (AOP) Structure”, fifth ¶ of the section and third ¶ of the page, second and third sentence. “RCW 70.94.161 (2)(a),¹⁰ for example, requires that all proposed permits are reviewed by a professional engineer (or their staff) employed by Ecology. Among other things, this assures the public that at least one “independent” technical expert reviews a proposed AOP before it is approved, but it is not required or authorized by NERA.”</p>	<p>Please see response to comment # 9.</p> <p>A requirement of pre-issuance professional engineer review isn’t directly required for underlying conditions (e.g. FF-01 license). The underlying requirements to the Hanford Air Operating Permit (AOP) (e.g. Ecology Approval Orders, Health FF-01 License, etc...) have been finalized prior to revision of the AOP. This issue was addressed by the United States Environmental Protection Agency in Exhibit A, page 6, second full sentence which stated “... Part 70 cannot be used to revise or change applicable requirements.”</p> <p>The AOP incorporated all of the applicable requirements, was prepared by and engineer, and will be stamped by a licensed professional engineer in the State of Washington who is in the employ of the Department of Ecology.</p> <p>No change in the AOP is required.</p>

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79	5/8/15	Tom Carpenter, comment # 6	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 2, Section “I. General Air Operating Permit (AOP) Structure”, fifth ¶ of the section and third ¶ of the page, fourth sentence. “NERA is also silent on prior review by the public, affected states, the EPA, and the Pollution Control Hearings Board, while WAC 173-401 requires it.”</p>	<p>Please refer to Exhibit A, last paragraph of p. 5 -p. 6; Exhibit B, Issue No.2, pp.3-4; and Exhibit C,. p.2. The Exhibits specifically address the applicability of public notice requirements to underlying requirements.</p> <p>The FF-01 license from the Department of Health is completed and sent as a unit to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. The mechanism to change the FF-01 license is not part of the AOP process under Washington Administrative Code 173-401. However, if a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP.</p> <p>The AOP does have a public comment period, is sent to affected states, and the EPA. It can be appealed to the Pollution Control Hearings Board. As such the AOP is in compliance with applicable rules and regulations.</p> <p>No change in the AOP is required</p>
80	N/A	N/A	N/A	N/A	This comment number is being left intentionally blank.
81	5/8/15	Tom Carpenter, comment # 7	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, fifth ¶ of the section and first ¶ of the page, fifth and sixth sentence. “Hanford Challenge is also concerned about the omission of radon gas releases—defined as a HAP by section 112 of the CAA—in this AOP. The CAA’s Title V requires that permits address all HAPs, including radon and radionuclides.”</p>	<p>Radon has not been overlooked, WAC 246-247-020 (4) and 40CFR61.91(a) (both referenced in the General Conditions of Attachment 2) allow the exclusion of naturally occurring radon and its respective decay products unless the concentrations or rates of emissions have been enhanced by industrial processes. For example the 325 building has a radon generator as part of its licensed process (see EU ID 361) and radon emission are tracked and reported.</p> <p>Also see Exhibit X page 26 – 29</p>

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82	5/8/15	Tom Carpenter, comment # 8	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, sixth ¶ of the section and second ¶ of the page. “Finally, in Attachment 3 the Benton Clean Air Agency (BCAA), rather than Ecology, is empowered to enforce “National Emission Standards for Asbestos” (40 C.F.R. 61 subpart M). As previously noted, Ecology, as the sole permitting authority, is required by the CAA to have the authority and capacity to enforce all applicable requirements.”</p>	<p>Please see response to Comments #5, #6, #7, and # 33 for background information.</p> <p>The Department of Ecology has the authority to enforce the 40 CFR 61, subpart M. Attachment 3 for the Benton Clean Air Agency is similar to the inclusion of the FF-01 license from the Department of Health. It is added as an applicable requirement to the AOP. The BCAA Regulation 1, Article 8, is not enforceable by Ecology, but Ecology has authority to enforce the NESHAP.</p> <p>As Ecology has authority to enforce 40 CFR 61, subpart M, no change is required in the AOP.</p>
83	5/8/15	Tom Carpenter, comment # 9	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, seventh ¶ of the section and third ¶ of the page, bullet 1 of 4. “Hanford Challenge recommends that the following actions be taken to revise the AOP:</p> <ul style="list-style-type: none"> Regulate radionuclide emissions as a hazardous air pollutant under the CAA’s Title V and the Washington Clean Air Act 	<p>Radionuclides are regulated under RCW 70.98, RCW 70.94, and WAC 246-247. From the rules and regulations, the Department of Health creates the FF-01 license for the Hanford Site. This license is considered an applicable requirement for inclusion into the Hanford AOP. With the inclusion into the AOP, radionuclides are regulated under the CAA’s Title V program.</p> <p>No changes needed.</p>
84	5/8/15	Tom Carpenter, comment # 10	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, seventh ¶ of the section and third ¶ of the page, bullet 2 of 4. “Hanford Challenge recommends that the following actions be taken to revise the AOP:</p> <ul style="list-style-type: none"> Ensure that Ecology’s enforcement authority regarding radionuclides meets all legal requirements in the CAA 	<p>Please see the response to comment # 5.</p> <p>The commenter is concerned the permitting authority (e.g. Ecology, does not have adequate authority to enforce the radionuclide requirements in a license issued by Health that are part of an air operating permit). This issue was previously raised in inquiries to the United States Environmental Protection Agency and the Washington State Department of Health. Those agencies responded to the inquiry in letters dated October 11, 2012 and July 16, 2010 which are attached as Exhibit A and B respectively.</p> <p>Please see Exhibit A at p. 1-4; Exhibit B at p. 3, Issue 1, Exhibit X at p. 12 - 13 Claim 1</p>

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85	5/8/15	Tom Carpenter, comment # 11	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, seventh ¶ of the section and third ¶ of the page, bullet 3 of 4. “Hanford Challenge recommends that the following actions be taken to revise the AOP:</p> <ul style="list-style-type: none"> Address the emission of radon within this AOP 	<p>Radon has not been overlooked, WAC 246-247-020 (4) and 40CFR61.91(a) (both referenced in the General Conditions of Attachment 2) allow the exclusion of naturally occurring radon and its respective decay products unless the concentrations or rates of emissions have been enhanced by industrial processes. For example the 325 building has a radon generator as part of its licensed process (see EU ID 361) and radon emission are tracked and reported.</p>
86	5/8/15	Tom Carpenter, comment # 12	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, seventh ¶ of the section and third ¶ of the page, bullet 4 of 4. “Hanford Challenge recommends that the following actions be taken to revise the AOP:</p> <ul style="list-style-type: none"> Ensure Ecology, as the sole permitting authority, has the required authority to enforce all applicable standards, including those relating to radionuclides and asbestos 	<p>Please see Exhibit X page 12.</p> <p>Only Health has authority to carry out the requirements of NERA under R.C.W. Ch. 70.98 and W.A.C. Ch. 246-247 and that the NERA License is issued by Health to USDOE under that authority.</p> <p>As discussed in the EPA’s October 2012 Letter, however, a review of Washington’s statutes, regulations and the Washington Attorney General Opinion make clear that Ecology also has certain authorities with respect to radionuclides. Specifically, Ecology has adopted the Radionuclide NESHAPs by reference into its regulations at W.A.C. 173-400-075(1). Furthermore, Ecology has authority, and in fact is required, under R.C.W. 70.94.161(10)(a), W.A.C. 173-401-200(4)(a)(iv) and W.A.C. 173-400-600(1)(a), to include in the Hanford Title V Permit all requirements of Subpart H that apply to the Hanford Site.</p> <p>No change to the permit is required.</p>
87	5/8/15	Tom Carpenter, comment # 13	General Statement of Basis	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, eighth ¶ of the section and fourth ¶ of the page, first sentence. “...Hanford Challenge believes that the Statements of Basis should include the memorandum of understanding (MOU) between Ecology and the Department of Health that specifies the roles and responsibilities of each agency regarding radionuclide regulation at Hanford.11”</p>	<p>[PMG7]</p>

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88	5/8/15	Tom Carpenter, comment # 14	General Statement of Basis	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, eighth ¶ of the section and fourth ¶ of the page, second sentence. “The Statements of Basis should also address the legal and factual bases for using NERA, rather than the CAA, for regulating radioactive emissions.”</p>	<p>Please see Exhibit A and Exhibit X (, p 12 -13 comment 11)</p> <p>No change is required.</p>
89	5/8/15	Tom Carpenter, comment # 15	Standard Terms and General Conditions	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, ninth ¶ of the section, bullet 1 of 4. “... Hanford Challenge recommends the following modifications to the AOP’s Standard Terms and General Conditions:</p> <ul style="list-style-type: none"> (Section 4.6) ¹² -- Clarify that federally enforceable requirements includes all requirements of the CAA, including those related to radionuclides. While radionuclides are regulated by the state under NERA, they do not thus cease to be federally regulated under the CAA [including 42 U.S.C. 7416 & 40 C.F.R. 70]. “ 	<p>The WAC 173-401 has been federally approved and is therefore federally enforceable. As such, the WAC citations in Section 4.0 and 5.0 of the permit are federally enforceable, unless it specifically states it is State only (e.g. Section 4.12 has “{ ... RCW 70.94.221 (State only)]).</p> <p>As the WAC citations are federally enforceable, unless stated as “State only”, no change in the permit is required.</p>
90	5/8/15	Tom Carpenter, comment # 16	Standard Terms and General Conditions	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3, Section “I. General Air Operating Permit (AOP) Structure”, ninth ¶ of the section, bullet 2 of 4. “... Hanford Challenge recommends the following modifications to the AOP’s Standard Terms and General Conditions:</p> <ul style="list-style-type: none"> (Section 4.12) -- Specify how the permittee and the public would be able appeal terms and conditions created or enforced by the Department of Health pursuant to NERA (RCW 70.98) in License FF-01. This is necessary because the Pollution Control Hearings Board does not have jurisdiction over licenses created under NERA, and the Department of Health does not have the authority to issue an AOP under RCW 70.94, the CAA, or 40 C.F.R. 70.” 	<p>The appeal process for the AOP is presented in section 4.12 of the Standard Terms and General Conditions and Attachment 2 is part of the AOP.</p> <p>The FF-01 license, which is Attachment 2, from the Department of Health is sent to the Department of Ecology for inclusion into the Hanford Air Operating Permit (AOP) as an applicable requirement. If a correction needs to be represented in the AOP, an addendum will be added to Attachment 2 of the AOP to correct any omissions or error contained in the FF-01 license with respect to Subpart H, as Ecology also has authority to enforce the NESHAP.</p> <p>Thus appeals of the AOP, Attachment 2, for failure to incorporate Federal Requirements would be resolved in the Addendum of Attachment 2.</p> <p>No change in the AOP is required.</p>

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91	5/8/15	Tom Carpenter, comment # 17	Standard Terms and General Conditions	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 3 and 4, Section “I. General Air Operating Permit (AOP) Structure”, ninth ¶ of the section, bullet 3 of 4. “... Hanford Challenge recommends the following modifications to the AOP’s Standard Terms and General Conditions:</p> <ul style="list-style-type: none"> (Section 5.19) – Clarify that all modifications allowed by sections 5.19 and 5.20 do not apply to License FF-01 (Attachment 2), which was created under regulations and statutes that do not recognize either “Off-permit Changes” or “Changes Not Requiring Permit Revisions”.” 	<p>Please see response to comment # 20.</p> <p>No change to the permit is needed.</p>
92	5/8/15	Tom Carpenter, comment # 18	Standard Terms and General Conditions	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 4, Section “I. General Air Operating Permit (AOP) Structure”, ninth ¶ of the section, bullet 4 of 4. “... Hanford Challenge recommends the following modifications to the AOP’s Standard Terms and General Conditions:</p> <ul style="list-style-type: none"> (Section 5.19 & 5.20) – Clarify that new addresses provided by the EPA or Ecology are also acceptable.” 	<p>Please see the response to comment # 21.</p> <p>No change to the permit is needed.</p>

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93	5/8/15	Tom Carpenter, comment # 19	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 4, Section “II. Addressing Tank Vapors”, second ¶ of the section.</p> <p>Efforts to identify and characterize toxic chemical vapors, as well as to stop these vapors from escaping and protect workers, have been inadequate. Workers in and near Hanford’s 177 aging high-level waste tanks have periodically reported serious illnesses and injuries connected with powerful odors for decades, but the tank farms are currently categorized as “insignificant emissions units” in the AOP. According to the Hanford Tank Vapor Assessment Report,¹⁴ which was released in October 2014 by the Savannah River National Laboratory (SRNL), both the number of air pollutants and their concentration have been underreported. Without better monitoring practices and an accurate inventory of tank farm emissions, it is not possible to identify the regulatory and pollution control requirements that are applicable under the CAA. Yet, Ecology is obliged, under the CAA [40 C.F.R. 70.6 (a)(1)], to incorporate all applicable requirements, including those connected to all hazardous and toxic air pollutants (HAPSs and TAPs), into the AOP.</p>	<p>Ecology has incorporated all applicable requirements in to the Hanford AOP. This includes Notice of Construction permits for double shell tanks and single shell tanks in the Hanford Tank Farms.</p> <p>The data presented in the Hanford Tank Vapor Assessment Report (TVAR) is not being questioned, but the applicability or relevancy of the data to the Federal Clean Air Act and the Washington Clean Air Act is not clear as the data is lacking important meta-data (e.g. where was the sample collected, how was the sample collected, what protocols were used for sample collection, etc.). Ecology doesn’t have access to the actual data presented in the TVAR and can only depend on the information as presented in the report. This raises a question on how relevant the data are for use in determining ambient air concentration data to be compared to acceptable source impact level (ASIL) values of Washington Administrative Code 173-460 in developing a Notice of Construction Permit. It is the Notice of Construction Permit that is the applicable requirement for inclusion in the AOP.</p> <p>The objective of the Hanford Tank Vapor Assessment Team is stated on page 12 of 153 of the TVAR as “WRPS asked the Savannah River National Laboratory (SRNL) to assemble and lead the Hanford Tank Vapors Assessment Team (TVAT) 2014 to determine the adequacy of the established WRPS program and prevalent site practices to protect workers from adverse health effects of exposure to the chemical vapors on the Hanford tank farms.” [emphasis added] Ambient air is defined in 40 CFR Part 50.1 (e) as “... that portion of the atmosphere, external to buildings, to which the general public has access.” [emphasis added] In addition, WAC 173-460-070 requires compliance with the state TAPs requirements to be demonstrated “in any area to which the applicant does not restrict or control access.” The Hanford site is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers. The air at the Hanford Site doesn’t qualify as ambient air. Therefore, the State TAP requirements need not be met within the boundaries of the Hanford Site. However, on-site personnel are covered by other laws, rules, and regulations in regards to their safety.</p> <p>As the underlying requirements from the Notice of Construction Permits were generated in accordance with the rules and regulations for the creation of the permits, no need exists to change the underlying conditions. With no need to change the underlying condition, no need exists to change the AOP.</p>

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94	5/8/15	Tom Carpenter, comment # 20	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 4, Section “II. Addressing Tank Vapors”, third ¶ of the section.</p> <p>There may be some confusion about where such requirements and monitoring would apply, and who they are intended or required to protect. Ecology must ensure that the requirements of this AOP protect everyone, including those inside of the property line. Fortunately, in CAA Title V permits the emission limits, associated monitoring, reporting, and recordkeeping requirements apply at the individual emissions unit, rather than only at the source’s property boundaries,¹⁵ and many of its protections apply to all “persons,”¹⁶ rather than only the (offsite) “public.” Hanford employees do not stop being “persons” after arriving at work, and Ecology has the authority and responsibility under the CAA to protect them from dangerous emissions.</p>	<p>Please see response to comments #12, #13, and # 14.</p> <p>The requirements for monitoring, reporting, and recordkeeping is specific to each emission unit and related to the type of emission being monitored. Each emission unit has the appropriate monitor requirements in the issued permit for that unit. These requirements become part of the AOP monitoring, reporting, and record keeping requirements. As such, each emission unit is currently properly monitoring, reporting, and recordkeeping emission data. It is agreed that certain emission units have different points of compliance (e.g. opacity at the stack, HAPS and TAPS in ambient air, etc...), but these are addressed in the NOC permit and the AOP.</p> <p>The commenter provides the definition of a person, then states “... without reference to the location of that “person” when harmed”. However the citation of 42 USC 4713 [CAA § 113] states “... who negligently release into the ambient air any hazardous air pollutant...” [emphasis added]. Ambient air has been defined previously (see comment # 13) and ambient air is a location. Those the CAA protects people <i>located</i> in ambient air.</p> <p>Ecology agrees with the commenter that permits must “... be adequate to determine whether any hazardous air pollutant or extremely hazardous air pollutant released into the environment could harm any “person”.” But this is applicable to ambient air and the current monitoring, reporting, and recordkeeping meets this requirement.</p> <p>No change in the permit is required.</p>
95	5/8/15	Tom Carpenter, comment # 21	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 6, Section “II. Addressing Tank Vapors”, ninth ¶ of the section, last two sentences.</p> <p>“...WRPS does not attempt to protect workers from the synergistic effects of exposure to this dangerous mix of toxic vapors. Engineered controls at vapor release points or putting workers on supplied air are the obvious and recommended ways to effectively protect Tank Farm workers. However, currently there are no technologies deployed for capturing and treating the toxic vapors, nor is supplied air required in most cases at Hanford.”</p>	<p>The Clean Air Act regulates ambient air. Ambient air is defined in 40 CFR Part 50.1 (e) as “... that portion of the atmosphere, external to buildings, to which the general public has access.” [emphasis added] In addition, WAC 173-460-070 requires compliance with the state TAPs requirements to be demonstrated “in any area to which the applicant does not restrict or control access.” The Hanford site is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers. The air at the Hanford Site doesn’t qualify as ambient air. Therefore, the State TAP requirements need not be met within the boundaries of the Hanford Site. However, on-site personnel are covered by other laws, rules, and regulations in regards to their safety.</p> <p>No change to the AOP is required.</p>

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96	5/8/15	Tom Carpenter, comment # 22	General	<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 6 and 7, Section “II. Addressing Tank Vapors”, tenth ¶ of the section.</p> <p>“Internal memoranda generated by Department of Ecology personnel in 2014 indicate that Hanford is not in compliance with Clean Air Act standards set for either mercury or NDMA. One memo, dated September 27, 2014, indicates that the Acceptable Source Impact Levels (ASIL) had been exceeded for mercury by 111% of its ASIL and 1159% of the ASIL for NDMA.²⁶ Assuming that the model for the point of compliance was “the public”, which in Hanford’s case would be miles away from the tank farms (such as Route 243), exceedance of these standards is surprising. Even more worrisome, however, is the dose that humans closer to the emission sources must be encountering.”</p>	<p>The internal memorandum discussed by the commenter was based on initial analytical results submitted by the Permittee. It was discovered the Permittee reported the wrong units associated with the results. The initial units were reported as milligram per cubic meter. The actual values were in micrograms per cubic meter. This reduces the percentage by 1000%, so the actual values reported are below the ASIL values.</p> <p>No change to the AOP is required.</p>
97	5/8/15	Tom Carpenter, comment # 23		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 10, Section “II. Addressing Tank Vapors”, twenty-seventh ¶ of the section.</p> <p>Ecology and the EPA have the authority, under 40 C.F.R. 70.7 (f)(1)(iii)³⁶ & (iv),³⁷ to reopen the AOP, given the uncertainty regarding the variety and concentration of past and current tank vapor emissions. Hanford Challenge urges both agencies to exercise this authority, and make the strongest possible actions to protect human health and the environment from tank vapors mandatory under the AOP. Despite decades of recommendations by Hanford Challenge and others, as well as the devastating health effects they have had for many of those exposed, very little has been done by the U.S. Department of Energy and its contractors to address this issue. We therefore believe that action on tank vapors must be legally required and enforced aggressively. To the extent possible under the CAA, Ecology should incorporate the recommendations Hanford Tank Vapor Assessment Report into the AOP.</p>	<p>The Clean Air Act regulates ambient air. Ambient air is defined in 40 CFR Part 50.1 (e) as “... that portion of the atmosphere, external to buildings, to which the general public has access.” [emphasis added] In addition, WAC 173-460-070 requires compliance with the state TAPs requirements to be demonstrated “in any area to which the applicant does not restrict or control access.” The Hanford site is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers. The air at the Hanford Site doesn’t qualify as ambient air. Therefore, the State TAP requirements need not be met within the boundaries of the Hanford Site. However, on-site personnel are covered by other laws, rules, and regulations in regards to their safety.</p> <p>No change to the AOP is required.</p>

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98	5/8/15	Tom Carpenter, comment # 24		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 10, Section “II. Addressing Tank Vapors”, twenty-eighth ¶ of the section, bullet 1 of 6</p> <p>Hanford Challenge urges Ecology to:</p> <ul style="list-style-type: none"> • Reopen the Hanford AOP. 	No compelling reason exists or has been presented in comments to reopen the AOP
99	5/8/15	Tom Carpenter, comment # 25		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 10, Section “II. Addressing Tank Vapors”, twenty-eighth ¶ of the section, bullet 2 of 6</p> <p>Hanford Challenge urges Ecology to:</p> <ul style="list-style-type: none"> • Provide a schedule of compliance regarding adequate monitoring of tank vapors and for the identification and control of unaccounted for HAPs and TAPs, including those associated with transient peaks. These schedules are required under 40 C.F.R. 70.6(c)(3) and WAC 173-401-630 (3). Six-month progress reports are also required under 40 C.F.R. 70.6 (c)(4) and WAC 173-401-630 (4) 	<p>Please see response to comment # 12 and # 13.</p> <p>The underlying Notice of Constructions for emissions incorporated into this AOP as applicable requirements considered the emissions for the discharge point covered by that NOC. The impact to <i>ambient air</i> was evaluated at that time using modeled impacts to the ambient air from the best available sample data and application of conservative assumptions. From this evaluation an Approval Order was issued to the Permittee to operate the emissions point.</p> <p>A schedule of compliance is not required as hazardous air pollutants (HAPs) and toxic air pollutants (TAPs) have not reached ambient air in concentrations requiring action or have already been assigned permit conditions in the underlying applicable requirement (e.g. NOC permit). WAC 173-460-150 is used with HAPs and TAPs to determine the when modeling is required. The process in WAC 173-460 have been followed for NOC issued permits that have become incorporated into this AOP as applicable requirements. As such, the individual permits have already established and addressed HAPs and TAPs and the permittee is required to follow those requirements.</p> <p>With the permittee following the requirements of the underlying NOC permits, they do not need to supply a schedule of compliance.</p> <p>No change to the permit is needed.</p>

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100	5/8/15	Tom Carpenter, comment # 26		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 10, Section “II. Addressing Tank Vapors”, twenty-eighth ¶ of the section, bullet 3 of 6</p> <p>Hanford Challenge urges Ecology to:</p> <ul style="list-style-type: none">• Revise emission limits, monitoring, sampling, reporting, and recordkeeping requirements to reflect the findings and recommendations of the SRNL report.	<p>The data presented in the Hanford Tank Vapor Assessment Report (TVAR) is not being questioned, but the applicability or relevancy of the data to the Federal Clean Air Act and the Washington Clean Air Act is not clear as the data is lacking important meta-data (e.g. where was the sample collected, how was the sample collected, what protocols were used for sample collection, etc.). Ecology doesn’t have access to the actual data presented in the TVAR and can only depend on the information as presented in the report. This raises a question on how relevant the data are for use in determining ambient air concentration data to be compared to acceptable source impact level (ASIL) values of Washington Administrative Code 173-460 in developing a Notice of Construction Permit. It is the Notice of Construction Permit that is the applicable requirement for inclusion in the AOP.</p> <p>The objective of the Hanford Tank Vapor Assessment Team is stated on page 12 of 153 of the TVAR as “WRPS asked the Savannah River National Laboratory (SRNL) to assemble and lead the Hanford Tank Vapors Assessment Team (TVAT) 2014 to determine the adequacy of the established WRPS program and prevalent site practices to protect workers from adverse health effects of exposure to the chemical vapors on the Hanford tank farms.” [emphasis added] Ambient air is defined in 40 CFR Part 50.1 (e) as “... that portion of the atmosphere, external to buildings, to which the general public has access.” [emphasis added] In addition, WAC 173-460-070 requires compliance with the state TAPs requirements to be demonstrated “in any area to which the applicant does not restrict or control access.” The Hanford site is land owned or controlled by the source and to which general public access is precluded by a fence or other physical barriers. The air at the Hanford Site doesn’t qualify as ambient air. Therefore, the State TAP requirements need not be met within the boundaries of the Hanford Site. However, on-site personnel are covered by other laws, rules, and regulations in regards to their safety.</p> <p>As the underlying requirements from the Notice of Construction Permits were generated in accordance with the rules and regulations for the creation of the permits, no need exists to change the underlying conditions. With no need to change the underlying condition, no need exists to change the AOP.</p>

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101	5/8/15	Tom Carpenter, comment # 27		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 10, Section “II. Addressing Tank Vapors”, twenty-eighth ¶ of the section, bullet 4 of 6</p> <p>Hanford Challenge urges Ecology to:</p> <ul style="list-style-type: none"> Provide a full and accurate inventory of regulated air pollutants, from both point sources and fugitive emissions, that could be expected to be emitted by the tanks in a manner consistent with SRNL’s recommendations. 	Please see comment # 100
102	5/8/15	Tom Carpenter, comment # 28		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 10, Section “II. Addressing Tank Vapors”, twenty-eighth ¶ of the section, bullet 5 of 6</p> <p>Hanford Challenge urges Ecology to:</p> <ul style="list-style-type: none"> Re-evaluate the categorization of the tank farms as “insignificant emissions units.” Because tank vapors have not been adequately characterized, it is not possible to know what federal standard may be applicable. WAC 173-401-530 (2)(a) makes it clear that “no emissions unit or activity subject to a federally enforceable applicable requirement shall qualify as an insignificant emissions unit or activity.” Additionally, radionuclides are regulated without a de minimis under 40 C.F.R. 61 subpart H, which is a federally enforceable requirement. Therefore no emission unit subject to 40 C.F.R. 61 subpart H can be “insignificant,” including the tank farms, and should be included in Attachment 1 rather than Attachment 2, which is based on state law (NERA). Attachment 1, Section 1.2, pg. 11, lines 9-11³⁸ should therefore be deleted. 	<p>The Tank Farm emissions have not been categorically designated as insignificant emission units. Section 1.4.25 and 1.4.26 are both permits for Tank Farm emissions units. Tank farm emissions have been and are evaluated against WAC 173-400, <i>General Standards for Air Pollution Sources</i>, to determine if they need to have a Notice of Construction Approval Order (permit) issued for their emissions. For Tank Farm emissions requiring an NOC permit, a permit is issued following the regulations of WAC 173-400. Upon issuance, the permit becomes an applicable requirement and is added to the AOP.</p> <p>No permit change is required.</p>

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103	5/8/15	Tom Carpenter, comment # 29		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 10, Section “II. Addressing Tank Vapors”, twenty-eighth ¶ of the section, bullet 6 of 6</p> <p>Hanford Challenge urges Ecology to:</p> <ul style="list-style-type: none">• Ensure that all of these requirements are subject to public review, as required by 40 C.F.R. 70.7 (h) and WAC 173-401-800.	<p>Ecology is following the requirements of the Federal and Washington Clean Air Acts in regulating the Hanford Site. Ecology strives to uniformly apply these regulations, regardless of the Permittee’s size, location, ownership (e.g. Government or Private), or activity being regulated.</p> <p>Public involvement is covered in WAC 173-401-800 and Ecology follows this rule to ensure accurate permitting information is made available to the public in a timely manner.</p>
104	5/8/15	Tom Carpenter, comment # 30		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 110, Section “III. Other Comments”, bullet 1 of 6</p> <ul style="list-style-type: none">• Attachment 1, Table 1.4 should include conditions from BCAA Administrative Order (AO) of Correction, No. 20030006, for control of fugitive dust from the Marshaling Yard.	<p>The dust control requirements are found in the terms of the underlying requirement in Approval Order DE02NWP-002, Amendment 4. DE02NWP-002, Amendment 4 states a dust control plan shall be “developed and implemented”. Additionally, the dust control plan “shall be made “available to Ecology upon request.”</p> <p>This issue was also heard and resolved by the Environmental Hearings Office, PCHB NO. 07-012, p. 15 and 16.[PMG8]</p> <p>No change in the AOP is required.</p>

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105	5/8/15	Tom Carpenter, comment # 31		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 110, Section “III. Other Comments”, bullet 2 of 6</p> <ul style="list-style-type: none">Attachment 1, Table 1.4 should include conditions from BCAA Administrative Order (AO) of Correction, No. 20030006, for control of fugitive dust from the Marshaling Yard.	<p>The <i>Dust Control Plan for the WTP Construction Site</i> (24590-WTP-GPP-SENV-015) was originally prepared December 23, 2002 to meet DE02NWP-002, Condition 8.1. The original DE02NWP-002 did not include the WTP Marshalling Yard.</p> <p>On March 21, 2003, a separate <i>WTP Marshalling Yard Dust Control Plan</i> was developed in response to a BCAA letter.</p> <p>In 2006, Ecology incorporated the WTP Marshalling Yard into DE02NWP-002 via Amendment 4 in response to a public comment made during review of AOP 00-05-006, Renewal 1. Separate dust control plans for both WTP locations continued to be implemented.</p> <p>On March 3, 2010, the above Dust Control Plans were consolidated into one plan with issuance of 24590-WTP-GPP-SENV-015, Revision 1, <i>Fugitive Dust Control</i>.</p> <p>The issuance of Renewal 2 of the Hanford AOP occurred on April 1, 2013. The issuance of an AOP renewal is akin to issuing a brand new permit. As the dust control plan was resolved in Renewal 1 of the AOP, when Renewal 2 was issued it was no longer necessary to explain in Renewal 2’s Statement of Basis information about the Marshalling Yard dust control plan.</p> <p>No change is required to the permit or Statement of Basis.</p>

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Comments Received and Responses to Comments

Comment Number	Date	Source	Document Location	Comment	Response
106	5/8/15	Tom Carpenter, comment # 32		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 110, Section “III. Other Comments”, bullet 3 of 6</p> <ul style="list-style-type: none"> In License FF-01 (Attachment 2), the sum of allowable potentials-to-emit exceeds 10 mrem/year. Ecology should track and report the total potential radionuclide emissions allowed from individual emissions units specified in Attachment 2, Enclosure 1 (Emission Unit Specific License). It should also include potential radionuclide emissions from emissions unit regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). 	<p>Attachment 2 (FF-01 License) is created under the authority of WAC 246-247 and WAC 246-247 does not require the sum of all potentials-to-emit radionuclides. As no regulatory basis exists to require the summation, it will not be added as a permit condition.</p> <p>Regulations promulgated under statutory authority other than the CAA (e.g., RCRA and CERCLA) are not Title V applicable requirements and are not included in the license. In addition, actions taken pursuant to CERCLA are exempt from permitting. However, the actions taken must meet the substantive requirements of applicable or relevant and appropriate requirements (ARARs) (e.g., WAC 246-247-040, ALARACT). Characterization and cleanup activities are being conducted at Hanford pursuant to CERCLA. The characterization and cleanup activities are applying best available radionuclide control technology to control emissions, and emissions are being monitored to ensure that the offsite dose to the maximally exposed individual is below the applicable standards. The CERCLA decision documents, such as an Action Memo, identify ARARs. Hanford is required to report all radioactive air emissions (including those resulting from CERCLA actions) to demonstrate compliance with all dose standards (WAC-246-247 and 40CFR61).</p> <p>Ecology offers the following explanation.</p>
107	5/8/15	Tom Carpenter, comment # 33		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 110, Section “III. Other Comments”, bullet 4 of 6</p> <ul style="list-style-type: none"> The Statement of Basis for Standard Terms and General Conditions, Renewal 2, Revision B contains an error (page iv, line 1). It states “Health regulates radioactive air emissions under the authority of RCW 70.92,” but RCW 70.92 does not authorize any air pollution regulations. 	<p>Ecology agrees:</p> <p>Line 1 on page iv of the Statement of Basis for Standard Terms and General Conditions will be changed from: “Health regulates radioactive air emissions under the authority of RCW 70.92, . . .”. to “Health regulates radioactive air emissions under the authority of RCW 70.98 and 70.94....”</p>

Hanford Air Operating Permit Renewal # 2, Revision B
Public Comment Period: March 22 through May 8, 2015
Comments Received and Responses to Comments

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108	5/8/15	Tom Carpenter, comment # 34		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 110, Section “III. Other Comments”, bullet 5 of 6</p> <ul style="list-style-type: none"> Provide the public with all of the information used in the permitting process, including the addition of six new emission units, the removal of nine emission units, and the replacement of twenty eight Notice of Construction orders of approval from the Draft Statement of Basis for Attachment 2, Table of Changes from FF-01 12-10-14 (pgs. 23-32). This is required under 40 C.F.R. 70.7 (h)(2). The EPA, in Sierra Club v. Johnson,³⁹ interpreted 40 C.F.R. 70.7 (h)(2) such that the use of any information in the permitting process makes it “relevant” to the permit decision, and should thus be available to the public. Public review should be restarted so that this information can be taken into account by commenters. 	<p>Attachment 2 is created under the authority of WAC 246-247 and provided to Ecology as a whole. Ecology accepts the FF-01 license “as-is” and will review it to see if any information needs to be added to the Addendum to Attachment 2. Thus all of the information used to create the permit was provided to the public during the public comment period.[PMG9]</p> <p>No requirement exists in WAC 246-247 for justifying changes in the FF-01 license. The Department of Health created a “Table of Changes” in the FF-01 License to provide a brief description of changes (starting page 23 of Attachment 2) in an effort to provide the reader with a path to request more information if needed. This is an effort to reduce the burden on the reader to allow them to request more information on specific items of interest,</p> <p>It is not necessary to restart public comment and no change in the AOP is required.</p>
109	5/8/15	Tom Carpenter, comment # 35		<p>The submitted comments are presented in a text format (as opposed to a listing format). Ecology has made a best faith effort to extract and list each comment from the text and present it as a specific and unique comment. The full text of the submitted comments is presented in Exhibit X.</p> <p>Page 110, Section “III. Other Comments”, bullet 6 of 6</p> <ul style="list-style-type: none"> Revisions to the AOP should also either include the Columbia River as a conduit for the emission of airborne radionuclides, or the legal and factual reasons for its exclusion should be presented to the public. Uranium from the soil and groundwater of Hanford’s 300 area is leeching into the Columbia River,⁴⁰ and uranium decays into (among other things) radon, which is a dangerous radioactive gas. As previously mentioned, the regulation of radon emissions has been improperly omitted from the AOP, and must be incorporated into the permit. This uranium and radon contamination is a result of previous Hanford operations, and so creates exposures beyond natural background radiation levels. It is therefore required under the CAA that it be regulated as an HAP in this AOP. 	<p>All registered and any unregistered sources of radioactive air emissions are monitored by DOE using ambient air samplers as described in Section 5 of Attachment 2 (FF-01). DOE reports the results of this monitoring program in the annual air emissions report. As a result of this monitoring, the Columbia River is not deemed a credible source of radionuclide air emissions. The Department of Health has submitted a request to DOE to determine if this concern is valid.</p> <p>Radon has not been overlooked, both WAC 246-247-020 (4) and 40 CFR 61.91(a) allow the exclusion of naturally occurring radon and its respective decay products unless the concentrations or rates of emissions have been enhanced by industrial processes. For example the 325 building has a radon gas generator as part of its licensed process (see EU ID 361).</p> <p>Also see Exhibit X page 26 - 29</p> <p>No change in the AOP is required.</p>